

LISTING OF CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

Claims 1-27 (Cancelled).

28. (Currently Amended) A method of operating a motor of a pump for use with at least one of a pool and a spa, the method comprising:

measuring an AC line current;

determining whether the AC line current is greater than a programmed threshold causing a jamming fault condition due to a foreign object obstruction in at least one of the pool and the spa;

reducing at least one of an output voltage provided to the motor and an operating frequency of the motor if the AC line current is less than the programmed threshold in order to drive the motor in a limp mode in an attempt to clear the jamming fault condition and the foreign object obstruction; and

shutting down the motor if the motor does not operate within operational limits while being driven in the limp mode and the jamming fault condition and the foreign object obstruction cannot be cleared.

29. (Original) The method of claim 28 and further comprising driving the motor in the limp mode without generating a fault condition code.

30. (Original) The method of claim 29 and further comprising generating the fault condition code while shutting down the motor.

31. (Original) The method of claim 28 and further comprising indicating to a user that the motor is operating in the limp mode.

Claims 32-86 (Cancelled).

87. (Currently Amended) A method of operating a motor of a pump for use with at least one of a pool and a spa, the method comprising:

measuring a parameter including at least one of an actual pressure, a bus current, a bus voltage, a line current, a temperature of a heat sink, and a speed of the motor;

determining if the parameter is outside of a range causing a jamming fault condition due to a foreign object obstruction in at least one of the pool and the spa;

executing a recovery operation if the parameter is outside of a range in an attempt to clear the jamming fault condition and the foreign object obstruction, the recovery operation including at least one of generating an updated speed control command, driving the motor in a limp mode, shutting down the motor and then restarting the motor, and operating the motor in a reverse direction and then operating the motor in a forward direction; and

shutting down the motor if the recovery operation fails and the jamming fault condition and the foreign object obstruction cannot be cleared.